

CLAIMS

1. A polyester resin composition containing a thermoplastic polyester resin and layered phyllosilicate,
- 5 wherein said layered phyllosilicate in said resin composition satisfies at least one of the following conditions (a) to (c):
- (a) ratio of layered phyllosilicate having equivalent area circle diameter [D] of at most 3,000 Å is at least 20 %;
- (b) a mean value of equivalent area circle diameter [D] is at most 5000 Å;
- 10 (c) the number of particles [N] per unit ratio of layered phyllosilicate present in 100 μm^2 of a resin composition is at least 30.

2. The polyester resin composition of Claim 1,
- wherein the layered phyllosilicate in the resin composition satisfies at
- 15 least one of the following conditions (d) to (f):
- (d) average aspect ratio (ratio of layer length/layer thickness) is 10 to 300;
- (e) the maximum layer thickness is at most 2,000 Å;
- (f) average layer thickness is at most 500 Å.

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3. The polyester resin composition of Claim 2, which satisfies all of said (d) to (f).

4. A polyester resin composition containing a thermoplastic
- 25 polyester resin and layered phyllosilicate,
- wherein at least one of the following conditions (g) to (i) is satisfied:
- (g) difference ($\eta_e - 3\eta$) between extensional viscosity η_e and a value three

times the shear viscosity η at 280°C under shear rate of 100 (1/s) is larger than 300 Pa·s;

(h) difference $\Delta\eta_e$ between η_e under shear rate of 100 (1/s) and η_e under shear rate of 1,000 (1/s) at 280°C is at least 500 Pa·s;

5 (i) product $J_{e0}\eta_0$ of equilibrium compliance J_{e0} by zero shear viscosity η_0 at 280°C is at least 0.8 second.

5. The polyester resin composition containing a thermoplastic polyester resin and layered phyllosilicate of Claim 1, 2 or
10 3,

wherein at least one of the following conditions (g) to (i) is satisfied:

(g) difference $(\eta_e - 3\eta)$ between extensional viscosity η_e and a value three times the shear viscosity η at 280°C under shear rate of 100 (1/s) is larger than 300 Pa·s;

15 (h) difference $\Delta\eta_e$ between η_e under shear rate of 100 (1/s) and η_e under shear rate of 1,000 (1/s) at 280°C is at least 500 Pa·s;

(i) product $J_{e0}\eta_0$ of equilibrium compliance J_{e0} by zero shear viscosity η_0 at 280°C is at least 0.8 second.

20 6. The polyester resin composition of Claim 5, which satisfies all of said (g) to (i).

7. The polyester resin composition of Claim 1, 2 or 3, which contains a fibrous filler and/or a polycarbonate resin.

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8. A process for producing a polyester resin composition containing a thermoplastic polyester resin and layered phyllosilicate

comprising:

(A) a step for preparing a dispersion of layered phyllosilicate and water containing layered phyllosilicate and water;

(B) a step for mixing a polymerizable pre-polymer of the thermoplastic polyester resin with said dispersion of layered phyllosilicate and water;
5 and

(C) a step for polymerizing the thermoplastic polyester resin.